NAKAMURA et al Serial No. 09/463,643

Replace the paragraph on page 39, lines 9-12 as follows:

Subsequently, at 1020°C, using silane gas as an impurity gas, a second nitride semiconductor layer (the n-type contact layer) made of Si doped n-type GaN is grown.

The resistivity of the resulting LD device was also  $5 \times 10^{-3} \Omega \cdot \text{cm}$ .

## IN THE CLAIMS

Cancel claims 1-17.

Add the following new claims:

18. (New) A nitride semiconductor light emitting device which comprises at least a substrate, an n-type contact layer for forming an n-electrode, an active layer where electrons and holes are recombined and a p-type contact layer for forming a p-electrode, each layer being made of nitride semiconductor,

wherein said n-type contact layer is a super-lattice layer selected from the group consisting of (1) a multi-layered film made by laminating at least a nitride semiconductor layer doped with an n-type impurity and a nitride semiconductor undoped with an n-type impurity, and (2) a multi-layered film made by laminating at least a high doped nitride semiconductor layer doped with an n-type impurity and a low doped nitride semiconductor layer doped with an n-type impurity less than that of said high doped nitride semiconductor layer,

wherein said n-type contact layer has a carrier density of more than  $3x10^{18}$ /cm<sup>3</sup>.

19. (New) A nitride semiconductor light emitting device which comprises at least a substrate, an n-type contact layer for forming an n-electrode, an active layer where



electrons and holes are recombined and a p-type contact layer for forming a p-electrode, each layer being made of nitride semiconductor,

wherein said n-type contact layer is a super-lattice layer selected from the group consisting of (1) a multi-layered film made by laminating at least a nitride semiconductor layer doped with an n-type impurity and a nitride semiconductor undoped with an n-type impurity, and (2) a multi-layered film made by laminating at least a high coped nitride semiconductor layer doped with an n-type impurity and a low doped nitride semiconductor layer doped with an n-type impurity less than that of said high doped nitride semiconductor layer,

wherein said n-type contact layer has a carrier density of more than  $3x_10^{-3}\Omega$ cm.

20. (New) A nitride semiconductor light emitting device according to claims 18 or 19,

wherein said n-type contact layer is super-lattice layer of combination of nitride layers selected from the group consisting of GaN/GaN, InGaN/GaN, AlGaN/GaN and InGaN/AlGaN, at least either one of which is dozed with Si.

21. (New) A nitride semiconductor emitting device according to claim 18 or 19,

wherein said n-type contact layer has a first surface and a second surface, on which first and second layers of undoped nitride semiconductor or nitride semiconductor doped with an n-type impurity less than that of said super super-lattice are formed respectively to make a three-layer laminated structure.



22. (New) A nitride semiconductor emitting device according to claim 18 or 19, wherein said super lattice layer is made by laminating layers which have the same constitutions and different amounts of an n-type impurity from each other.

23. (New) A nitride semiconductor emitting device according to claim 22, wherein said n-type contact layer has a first surface and a second surface, on which first and second layers or undoped nitride semiconductor or nitride semiconductor doped with an n-type impurity less than that of said super super-lattice are formed respectively to make a three-layer laminated structure.

24. (New) A nitride semiconductor emitting device according to claim 18 or 19, wherein said super lattice layer is made by laminating layers which have different constitutions from each other.

25. (New) A nitride semiconductor emitting device according to claim 24, wherein said n-type contact layer has a first surface and a second surface, on which first and second layers of undoped nitride semiconductor or nitride semiconductor doped with an n-type impurity less than that of said super super-lattice are formed respectively to make a three-layer laminated structure.

26. (New) A nitride semiconductor emitting device according to claim 18 or 19, wherein said super lattice layer is made by laminating layers which have different band gap energy from each other.



27. (New) A nitride semiconductor emitting device according to claim 26, wherein said n type contact layer has a first surface and a second surface, on which first and second layers of undoped nitride semiconductor or nitride semiconductor doped with an n-type impurity less than that of said super super-lattice are formed respectively to make a three-layer laminated structure.

28. (New) A nitride semiconductor emitting device according to claim 26, wherein the nitride semiconductor layers having a higher band gap energy than the other layers of said super lattice layer is doped with an impurity in a higher concentration than the other layers.

· 29. (New) A nitride semiconductor emitting device according to claim 26, wherein the nitride semiconductor lawers having a smaller band gap energy than the others of said super lattice layer is doped with an impurity in a higher concentration than the others.

30. (New) A nitride semiconductor emitting device according to claim 21 wherein said second nitride semiconductor layer is made of InGaN and is formed on said n-type contact layer,

wherein a nitride semiconductor layer which contains Al is formed on said second nitride semiconductor layer.